

mi.) of the center of the city; and within 120 km (75 mi.) of the interconnected base station transmitter. The consensual agreements among the co-channel licensees must specifically state the terms agreed upon and a statement must be submitted to the Commission indicating that all co-channel licensees have consented to the use of interconnection. If a licensee has agreed to the use of interconnection on the channel, but later decides against the use of interconnection, the licensee may request that the co-channel licensees reconsider the use of interconnection. If the licensee is unable to reach an

agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed to the use of interconnection and the new licensee does not agree, the new licensee may request that the co-channel licensees reconsider the use of interconnection. If the new licensee cannot reach an agreement with co-channel licensees it may request that the Commission reassign it to another channel.

NOTE: Coordinates are referenced to North American Datum 1983 (NAD83).

Urban area	North latitude	West longitude
New York, New York-Northeastern New Jersey	40° 45' 06.4"	73° 59' 37.5"
Los Angeles-Long Beach, California	34° 03' 15.0"	118° 14' 31.3"
Chicago, Illinois-Northwestern Indiana	41° 52' 28.1"	87° 38' 22.2"
Philadelphia, Pennsylvania/New Jersey	39° 56' 58.4"	75° 09' 19.6"
Detroit, Michigan	42° 19' 48.1"	83° 02' 56.7"
San Francisco-Oakland, California	37° 46' 38.7"	122° 24' 43.9"
Boston, Massachusetts	42° 21' 24.4"	71° 03' 23.2"
Washington, DC/Maryland/Virginia	38° 53' 51.4"	77° 00' 31.9"
Cleveland, Ohio	41° 29' 51.2"	81° 41' 49.5"
St Louis, Missouri/Illinois	38° 37' 45.2"	90° 12' 22.4"
Pittsburgh, Pennsylvania	40° 26' 19.2"	79° 59' 59.2"
Minneapolis-St. Paul, Minnesota	44° 58' 56.9"	93° 15' 43.8"
Houston, Texas	29° 45' 26.8"	95° 21' 37.8"
Baltimore, Maryland	39° 17' 26.4"	76° 36' 43.9"
Dallas-Fort Worth, Texas	32° 47' 09.5"	96° 47' 38.0"
Milwaukee, Wisconsin	43° 02' 19.0"	87° 54' 15.3"
Seattle-Everett, Washington	47° 36' 31.4"	122° 20' 16.5"
Miami, Florida	25° 46' 38.4"	80° 11' 31.2"
San Diego, California	32° 42' 53.2"	117° 09' 24.1"
Atlanta, Georgia	33° 45' 10.4"	84° 23' 36.7"
Cincinnati, Ohio/Kentucky	39° 06' 07.2"	84° 30' 34.8"
Kansas City, Missouri/Kansas	39° 04' 56.0"	94° 35' 20.8"
Buffalo, New York	42° 52' 52.2"	78° 52' 20.1"
Denver, Colorado	39° 44' 58.0"	104° 59' 23.9"
San Jose, California	37° 20' 15.8"	121° 53' 27.8"

(e) Additional frequencies shall not be assigned to enable any licensee to employ a preferred interconnection capability.

(f) Paging systems operating on frequencies in the bands below 800 MHz are not subject to the interconnection provisions of § 90.477(d)(3).

[47 FR 17520, Apr. 23, 1982, as amended at 48 FR 29518, June 27, 1983; 50 FR 15152, Apr. 17, 1985; 51 FR 14998, Apr. 22, 1986; 51 FR 37401, Oct. 22, 1986; 52 FR 15501, Apr. 29, 1987; 52 FR 29856, Aug. 12, 1987; 53 FR 1025, Jan. 15, 1988; 58 FR 44961, Aug. 25, 1993; 61 FR 6576, Feb. 21, 1996; 62 FR 18934, Apr. 17, 1997; 63 FR 68966, Dec. 14, 1998]

§ 90.483 Permissible methods and requirements of interconnecting private and public systems of communications.

Interconnection may be accomplished by commercial mobile service providers licensed under this part by any technically feasible means. Interconnection may be accomplished by private mobile service providers either manually or automatically under the supervision and control of a transmitter control operator at a fixed position in the authorized system of communications or it may be accomplished under the supervision and control of mobile operators, and is subject to the following provisions:

(a) Where a system is interconnected manually at a fixed control point, the control point operator must maintain the capability to turn the carrier of the transmitter off or to de-activate the system completely when circumstances warrant such action.

(b) When the system is interconnected automatically it may be supervised at the control point or in mobile units.

(1) For control point supervision, the following is required:

(i) The control point operator must maintain the capability to turn the carrier of the transmitter off or to de-activate the system completely when circumstances warrant such action.

(ii) When a frequency is shared by more than one system, automatic monitoring equipment must be installed at the base station to prevent activation of the transmitter when signals of co-channel stations are present and activation would interfere with communications in progress. Licensees may operate without the monitoring equipment if they have obtained the consent of all co-channel licensees located within a 120 km (75 mile) radius of the interconnected base station transmitter. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems on frequencies above 800 MHz are exempt from this requirement.

(2) For mobile unit supervision, the following is required:

(i) When a frequency is shared by more than one system, automatic monitoring equipment must be installed at each base station to prevent its activation when signals of other co-channel stations are present and activation would interfere with communications in progress. Licensees may operate without this equipment if they have obtained the consent of all co-channel licensees located within a 120 km (75 mile) radius of the interconnected base station transmitter. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems above 800 MHz are exempt from this requirement.

(ii) Initial access from points within the public switched telephone network must be limited to transmission of a 3-second tone, after which time the transmitter shall close down. No additional signals may be transmitted until acknowledgement from a mobile station of the licensee is received. Licensees are exempt from this requirement if they have obtained the consent of all co-channel licensees located within a 120 km (75 mile) radius of the interconnected base station transmitter. However, licensees may choose to set

their own time limitations. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems above 800 MHz are exempt from this requirement.

(c) In single frequency systems, equipment must be installed at the base station which will limit any single transmission from within the public switched telephone network to 30 seconds duration and which in turn will activate the base station receiver to monitor the frequency for a period of not less than three (3) seconds. The mobile station must be capable of terminating the communications during the three (3) seconds. Licensees are exempt from this requirement if they have obtained the consent of all co-channel licensees located within a 120 km (75 mile) radius of the interconnected base station transmitter. However, licensees may choose to set their own time limitations. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agree-

ment with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is necessary, the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission.

(d) A timer must be installed at the base station transmitter which limits communications to three (3) minutes. After three (3) minutes, the system must close down, with all circuits between the base station and the public switch telephone network disconnected. This provision does not apply to systems which establish eligibility pursuant to §§ 90.20(a)(1)(i), 90.20(a)(1)(ii), and 90.20(a)(2), except §§ 90.20(a)(2)(i) and 90.20(a)(2)(ii), or who are Power, Petroleum, or Railroad licensees (as defined in § 90.7), or to systems above 800 MHz. All systems must be equipped with a timer that closes down the transmitter within three minutes of the last transmission. Licensees may operate without these requirements if they have obtained the consent of all co-channel licensees located within a 120 km (75 mile) radius of the interconnected base station transmitter. However, licensees may choose to set their own time limitations. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of

Federal Communications Commission

§ 90.493

monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission.

[47 FR 17520, Apr. 23, 1982, as amended at 48 FR 29518, June 27, 1983; 50 FR 15153, Apr. 17, 1985; 58 FR 44961, Aug. 25, 1993; 59 FR 59966, Nov. 21, 1994; 61 FR 6576, Feb. 21, 1996; 62 FR 18934, Apr. 17, 1997]

Subpart P—Paging Operations

§ 90.490 One-way paging operations in the private services.

(a) Subject to specific prohibition or restriction by rule provisions governing the radio service in which a licensee's radio system is authorized, paging operations are permitted:

(1) Where the signals and messages are transmitted by a control operator of the licensee stationed at a licensed control point in the licensee's system of communication.

(2) Where the signals and messages are transmitted from an operating position within an internal system of communication which meets the tests of §§ 90.471 through 90.475.

(3) Where the signals and messages are transmitted from a dispatch point within the licensee's system of communication, as defined as § 90.7.

(b) Systems employing dial-up circuits (§ 90.461(c)) may be used in one-way paging operations, but only where the paging signals are transmitted as provided at paragraph (a)(1) of this section.

(c) Paging may be initiated directly from telephone positions in the public switched telephone network. When land stations are multiple licensed or otherwise shared by authorized users, arrangements for the telephone service must be made with a duly authorized carrier by users, licensees, or their authorized agents on a non-profit, cost-shared basis. When telephone service costs are shared, at least one licensee participating in the cost sharing arrangements must maintain cost sharing records and the costs must be distributed at least once a year. Licensees, users, or their authorized agents may also make joint use arrangements with a duly authorized carrier and arrange that each licensee or user pay the carrier directly for the licensee's or

user's share of the joint use of the shared telephone service. A report of the cost distribution must be placed in the licensee's station records and made available to participants in the sharing arrangement and the Commission upon request. In all cases, arrangements with the duly authorized carrier must disclose the number of licensees and users and the nature of the use.

[47 FR 39509, Sept. 8, 1982, as amended at 48 FR 56231, Dec. 20, 1983; 52 FR 15501, Apr. 29, 1987]

§ 90.492 One way paging operations in the 806-824/851-869 MHz and 896-901/935-940 MHz bands.

Paging operations are permitted in these bands only in accordance with §§ 90.645(e) and (f).

[54 FR 4030, Jan. 27, 1989]

§ 90.493 Paging operations on exclusive channels in the 929-930 MHz band.

Paging operations on the exclusive channels in the 929-930 MHz band are subject to the rules set forth in this section.

(a) *Exclusive channels.* The center frequencies of the channels in the 929-930 MHz band that may be assigned on an exclusive basis are as follows: 929.0125, 929.1125, 929.1375, 929.1875, 929.2125, 929.2375, 929.2875, 929.3125, 929.3375, 929.3625, 929.3875, 929.4125, 929.4375, 929.4625, 929.4875, 929.5125, 929.5375, 929.5625, 929.5875, 929.6125, 929.6375, 929.6625, 929.6875, 929.7125, 929.7375, 929.7625, 929.7875, 929.8125, 929.8375, 929.8625, 929.8875, 929.9125, 929.9375, 929.9625, and 929.9875 MHz.

(b) *Part 22 licensing, construction and operation rules apply.* Licensing, construction and operation of paging stations on the exclusive channels in the 929-930 MHz band are subject to the application filing, licensing procedure, auction procedure, construction, operation and notification rules and requirements that are set forth in part 22 of this chapter for paging stations operating in the 931-932 MHz band, instead of procedures elsewhere in this part.

(c) *Part 22 power limits apply; type acceptance required.* Paging operations on the exclusive channels in the 929-930